METHOD AND APPARATUS FOR DECOMPOSING SIGNAL JITTER USING MULTIPLE ACQUISITIONS

ABSTRACT OF THE DISCLOSURE

A method and apparatus for analyzing jitter in a signal. The signal is buffered to form a sequence of signal vectors and a time interval error function is calculated for each the signal vector. A time interval error spectrum is then calculated by transforming the time interval error function using a discrete Fourier transform. An average time interval error spectrum and an average power spectral density function are then calculated as averages of the amplitude of the time interval error spectrum and its amplitude squared, respectively. Parameters of the signal jitter are estimated from the average time interval error spectrum and the average power spectral density function.